

CLAIMS

What is claimed is:

1. A method, comprising:

receiving a first value representing an allowed amount of target traffic and second value representing a time interval during which to receive the allowed amount of target traffic, the first value and the second value defining a percentage of target traffic allowed through a port, the port having a port speed; and

determining that port speed changed by a factor of N ;

scaling the second value by a factor of $1/N$, respectively; and

based on the allowed amount of target traffic and the scaled second value, dropping target traffic when a percentage of target traffic.

2. The method of claim 1, further comprising selecting a clock from a set of clocks based on determining that port speed changed.

3. The method of claim 2, further comprising receiving the selected clock and incrementing a counter using the selected clock.

4. The method of claim 3, further comprising:

comparing an output of the counter to the second value; and

when the counter output is equal to the second generating the scaled second value.

5. The method of claim 1, further comprising receiving an indication that port speed changed from a media access controller (MAC).

6. The method of claim 1, further comprising:

comparing an amount of target traffic to the allowed amount of target traffic; and

causing a status flag to be set when the amount of target traffic and the allowed amount of target traffic are equal.

7. The method of claim 6, further comprising dropping target traffic until the time interval represented by the scaled second value has elapsed.

8. The method of claim 7, further comprising permitting target traffic through the port after the time interval represented by the scaled second value has elapsed.

9. The method of claim 1, further comprising receiving the first value representing an allowed amount of broadcast, multicast, or destination unknown traffic.

10. An apparatus, comprising:

logic to receive a first value representing an allowed amount of target traffic and second value representing a time interval during which to receive the allowed amount of target traffic, the first value and the second value defining a percentage of target traffic allowed through a port, the port having a port speed, the logic further to:

determine that port speed changed by a factor of N ,
scale the second value by a factor of $1/N$, respectively, and
based on the allowed amount of target traffic and the scaled second value, to drop target traffic when a percentage of target traffic exceeds the defined percentage of target traffic allowed through the port.

11. The apparatus of claim 10, further comprising:

logic to receive an indication that port speed changed;
a selector to select a clock from a set of clocks based on the indication that port speed changed;
a counter to receive the selected clock and to increment at a clock rate; and
a comparator to compare an output from the counter to the second value, and when the counter output is equal to the second value, to generate the scaled second value.

12. The apparatus of claim 10, wherein the logic is further to:

compare an amount of target traffic to the allowed amount of target traffic; and

cause a status flag to be set when the amount of target traffic and the allowed amount of target traffic are equal.

13. The apparatus of claim 12, wherein the logic is further to cause the status flag to be reset after the time interval represented by the scaled second value has elapsed.

14. The apparatus of claim 13, wherein the logic is further to permit target traffic through the port after the status flag is reset.

15. The apparatus of claim 10, wherein the first value represents an allowed amount of broadcast, multicast, or destination unknown traffic.

16. A system, comprising:

logic to receive a first value representing an allowed amount of target traffic and second value representing a time interval during which to receive the allowed amount of target traffic, the first value and the second value defining a percentage of target traffic allowed through a port, the port having a

port speed, the logic further to determine that port speed changed by a factor of N , to scale the second value by a factor of $1/N$, respectively, and based on the allowed amount of target traffic and the scaled second value, to drop target traffic when a percentage of target traffic exceeds the defined percentage of target traffic allowed through the port; and

a twisted pair cable to couple target traffic to the port.

17. The system of claim 16, wherein the twisted pair cable is a UTP twisted pair cable.

18. The system of claim 16, wherein the twisted pair cable is a STP twisted pair cable.

19. An article of manufacture, comprising:

a machine-accessible medium having data that, when accessed by a machine, cause the machine to perform the operations comprising:

receiving a first value representing an allowed amount of target traffic and second value representing a time interval during which to receive the allowed amount of target traffic, the first value and the second value defining a percentage of target traffic allowed through a port, the port having a port speed;

determining that port speed changed by a factor of N ;

scaling the second value by a factor of $1/N$, respectively; and
based on the allowed amount of target traffic and the scaled
second value, dropping target traffic when a percentage of target traffic exceeds
the defined percentage of target traffic allowed through the port.

20. The article of manufacture of claim 19, wherein the machine-accessible
medium further includes data that cause the machine to perform operations
comprising selecting a clock from a set of clocks based on determining that
port speed changed.

21. The article of manufacture of claim 20, wherein the machine-accessible
medium further includes data that cause the machine to perform operations
comprising receiving the selected clock and incrementing a counter using the
selected clock.

22. The article of manufacture of claim 21, wherein the machine-accessible
medium further includes data that cause the machine to perform operations
comprising:

comparing an output of the counter to the second value; and
when the counter output is equal to the second generating the
scaled second value.

23. The article of manufacture of claim 19, wherein the machine-accessible medium further includes data that cause the machine to perform operations comprising:

comparing an amount of target traffic to the allowed amount of target traffic; and

causing a status flag to be set when the amount of target traffic and the allowed amount of target traffic are equal.

24. The article of manufacture of claim 23, wherein the machine-accessible medium further includes data that cause the machine to perform operations comprising dropping target traffic until the time interval represented by the scaled second value has elapsed.

25. The article of manufacture of claim 24, wherein the machine-accessible medium further includes data that cause the machine to perform operations comprising permitting target traffic through the port when the time interval represented by the scaled second value has elapsed.